

Remarks

The applicant's remarks, below, are preceded by quotations of related comments of the examiner in small, boldface type.

Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staerzl (U.S. Patent Number 5,804,712). Staerzl discloses an oil flow sensor and circuit to indicate the presence of oil flow in a multi-cylinder internal combustion engine. The oil sensor includes a heating element positioned within the oil line directly in the oil flow path. Positioned upstream and downstream from the heating element are an upstream heat sensor and a downstream heat sensor. Each of the heat sensors is a negative temperature coefficient resistive device, such that the resistance of the heat sensor varies depending upon oil temperature at the sensor. The output of both the upstream and downstream sensor is coupled to a comparator. The comparator compares the value of the signals from the heat sensors and triggers a switching circuit when the temperature at the sensors approach one another, thus detecting that there is not adequate oil flow to the engine. The switching circuit is connected to a signaling device that indicates whether oil flow to the engine is adequate (see the abstract).

In reference to claim 12, figure 1 of Staerzl discloses a coupling (21) having two open ends adapted for connection to upstream and downstream tubes of a pulsating oil circulation system of an engine and a channel configured to direct oil to flow past a temperature sensor (18 and 20) connected to a sensing circuit, the sensing circuit comprising elements connected to determine a change in a voltage across the temperature sensor at [sic] to compare the change to a threshold, and to generate a flow-state signal based upon this comparison. Details on the operation of the device can be found in column 3 lines 12-36.

The applicant disagrees. Staerzl does not disclose or suggest (in the words of claim 12) a "sensing circuit comprising elements connected to determine a change in voltage across the thermistor, and to compare the change to a threshold." Rather, Staerzl's oil sensor "compar[es] the temperature at the upstream heat sensor 18 to the temperature at the downstream heat sensor 20 (column 3, lines 33-34)." Some implementations of claim 15 use only a single thermistor, which is simpler and less costly to produce than Staerzl's two sensors. Claim 12 was thus not anticipated and would not have been made obvious by Staerzl.

All of the dependent claims are patentable for at least the same reasons as the independent claim on which they depend.

The fact that the applicant has responded to certain positions taken by the examiner does not mean that the applicant concedes any other positions of the examiner. The fact that the applicant has stated certain reasons for patentability of the claims does not mean that there are not other good reasons for patentability of those claims or other claims.